

C L A I M S

What is claimed and desired to be secured by Letters Patent is as follows:

1. A molded door skin formed from:
 - a) a thermoplastic material.
2. The molded door skin as in Claim 1 wherein said thermoplastic material comprises polypropylene.
3. The molded door skin as in Claim 2 comprising approximately fifty to eighty five percent by weight polypropylene.
4. The molded door skin as in Claim 3 further comprising approximately ten to twenty percent by weight glass fibers.
5. The molded door skin as in Claim 2 comprising approximately sixty six percent by weight polypropylene and approximately fifteen percent by weight glass fiber.

6. The door skin as in Claim 1 wherein said thermoplastic material comprises:
 - a) high impact polystyrene.
7. The door skin as in Claim 6 comprising approximately eighty percent polystyrene and approximately twenty percent wood fiber.
8. A process for forming a door skin comprising the steps of:
 - a) providing a lower mold half shaped to form a first side of a door skin;
 - b) providing an upper mold half shaped to form a second side of a door skin;
 - c) advancing said first mold half beneath a source of molten thermoplastic;
 - d) allowing molten thermoplastic to flow from said source of molten thermoplastic into said first mold half;
 - e) controlling the flow of molten thermoplastic into said first mold half such that the quantity of molten thermoplastic flowing to any particular area of said first mold half corresponds to the thickness of the portion of the door skin to be formed at that particular area;

- f) advancing said first mold half from below said source of molten thermoplastic;
- g) advancing said second mold half into engagement with said first mold half forming the molten material deposited on said first mold half into the shape of a mold cavity formed between said first and second mold halves;
- h) allowing said molten thermoplastic in said mold cavity to set;
- i) advancing said second mold half away from said first mold half; and
- j) ejecting said door skin from between said first and second mold halves.

- 9. The process for forming a door skin as in claim 8 wherein said thermoplastic material comprises polypropylene.
- 10. The process for forming a door skin as in Claim 8 wherein said thermoplastic material comprises approximately fifty to eighty five percent by weight polypropylene.

11. The process for forming a door skin as in Claim 10 further comprising approximately ten to twenty percent by weight glass fibers.
12. The process for forming a door skin as in Claim 9 wherein said source of molten thermoplastic material comprises an extruder and the step of allowing molten thermoplastic to flow from said source of molten thermoplastic into said first mold half includes a previous step of feeding said polypropylene and glass fiber from a hopper into said extruder which melts said polypropylene.